

## CLAIMS

What is claimed is:

1        1. A method for automatically deploying a quality of service (“QoS”) policy to a  
2        plurality of devices in a packet telephony network based on a QoS policy template comprising  
3        the computer-implemented steps of:

4                receiving device information that defines authentication and connectivity information of a  
5        network device;

6                receiving interface information defining one or more interfaces associated with the  
7        device;

8                based on the device information and interface information, determining one or more  
9        policy templates that associate the quality of service tools with the device traffic flows for  
10      deployment to a plurality of network devices simultaneously;

11                creating and storing one or more quality of service policy templates in a database that  
12      may be used to implement quality of service settings in a network device.

1        2. A method according to claim 1 wherein said step of receiving interface  
2        information comprises executing an SNMP, telnet, or virtual device query of said device.

1        3. A method according to claim 1 wherein said step of determining policies  
2        comprises creating and storing a policy filter.

1        4. A method according to claim 1 wherein said step of determining policies  
2        comprises defining said policy’s action.

1           5.     A method for defining quality of service (“QoS”) policy templates for packet  
2     telephony networks comprising storing said policy templates in a centralized, network-wide  
3     policy database or another storage device.

1           6.     A method of deploying a quality of service (QoS) template in a packet telephony  
2     network comprising the computer implemented steps of:

3           generating a first list of command line interface (“CLI”) commands that correspond to  
4     properties for each device,  
5     sending said block of CLI commands to each device to be implemented.

1           7.     A computer-readable medium carrying one or more sequences of instructions for  
2     automatically deploying a quality of service (“QoS”) policy to a plurality of devices in a packet  
3     telephony network based on a QoS policy template, which instructions, when executed by one or  
4     more processors, cause the one or more processors to carry out the steps of:

5           receiving device information that defines the authentication and connectivity information  
6     of network device;

7           receiving said device’s interface information;

8           based on the device information and interface information, determining one or more

9     policy templates that associate the quality of service tools with the device traffic flows for  
10    deployment to several network devices simultaneously;

11           creating and storing one or more quality of service policy templates in a database that

12    may be used to implement quality of service settings in a network device.

1           8.     The computer-readable claim according to Claim 7 wherein said step of receiving  
2     interface information comprises executing an SNMP and telnet query of said device.

1           9.    The computer-readable claim according to Claim 7 wherein said step of  
2 determining policies comprises creating and storing a policy filter.

1           10.   The computer-readable claim according to Claim 7 wherein said step of  
2 determining policies comprises defining said policy's action.

1           11.   A computer-readable medium carrying one or more sequences of instructions for  
2 defining quality of service ("QoS") policy templates in a packet telephony network, which  
3 instructions, when executed by one or more processors, cause the one or more processors to  
4 store said policy templates in a centralized, network-wide policy database or another storage  
5 device.

1           12.   A computer-readable medium carrying one or more sequences of instructions for  
2 deploying quality of service ("QoS") policy templates in a packet telephony network, which  
3 instructions, when executed by one or more processors, cause the one or more processors to  
4 carry out the steps of: generating a first list of command line interface ("CLI") commands that  
5 correspond to properties for each device,

6            sending said block of CLI commands to each device to be implemented.

1           13.   An apparatus for automatically deploying a quality of service ("QoS") policy to a

2 plurality of devices in a packet telephony network based on a QoS policy template, comprising:

3            means for receiving device information that defines authentication and connectivity  
4 information of a network device;

5            means for receiving interface information defining one or more interfaces associated with  
6 the device;

7           based on the device information and interface information, means for determining one or  
8    more policy templates that associate the quality of service tools with the device traffic flows for  
9    deployment to several network devices simultaneously;

10           means for creating and storing one or more quality of service policy templates in a  
11    database that may be used to implement quality of service settings in a network device.

1           14.    An apparatus for automatically deploying a quality of service (“QoS”) policy to a  
2    plurality of devices in a packet telephony network based on a QoS policy template, comprising:  
3    a network interface coupled to a network for receiving command-line interface information  
4    therefrom;

5           one or more processors communicatively coupled to the network interface and configured to  
6    receive information therefrom;

7           one or more stored sequences for automatically deploying a quality of service (“QoS”) policy to  
8    a plurality of devices in a packet telephony network based on a QoS policy template and  
9    which, when executed by the one or more processors, cause the one or more processors to  
0    carry out the steps of:

1           receiving device information that defines authentication and connectivity information of a  
2    network device;

3           receiving interface information defining one or more interfaces associated with the  
4    device;

5           based on the device information and interface information, determining one or more  
6    policy templates that associate the quality of service tools with the device traffic flows for  
7    deployment to several network devices simultaneously;

18 creating and storing one or more quality of service policy templates in a database that  
19 may be used to implement quality of service settings in a network device.

Quality of Service  
Template Database